



39766-0160D2 Saved March 2 2006.txt

SEQUENCE LISTING

<10> AFAR, DANIEL E.
HUBERT, RENE S.
LEONG, KAHAN
RAITANO, ARTHUR B.
SAFFRAN, DOUGLAS C.
MITCHELL, STEPHEN CHAPPELL

<120> SERPENTINE TRANSMEMBRANE ANTIGENS EXPRESSED IN HUMAN CANCERS AND USES THEREOF

<130> 39766-0160D2

<140> US 10/750,262
<141> 2003-12-31

<150> US 10/011,095
<151> 2001-12-06

<150> US 09/323,873
<151> 1999-06-01

<150> US 60/087,520
<151> 1998-06-01

<150> US 60/091,183
<151> 1998-06-30

<160> 37

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 1195
<212> DNA
<213> Homo sapiens

<400> 1
ccgagactca cgggtcaagct aaggcgaaga gtgggtggct gaagccatac tatttttatag 60
aattaatgga aagcagaaaa gacatcacaa accaagaaga actttggaaa atgaagccta 120
ggagaaattt agaagaagac gattatttgc ataaggacac gggagagacc agcatgctaa 180
aaagacctgt gcttttgcac ttgcacacaa cagcccatgc tgatgaattt gactgccctt 240
cagaacttca gcacacacag gaactctttc cacagtggca cttgccaatt aaaatagctg 300
ctattatagc atctctgact tttctttaca ctctcttgag ggaagtaatt caccctttag 360
caacttccca tcaacaatat ttttataaaa ttccaatcct ggcatcaac aaagtcttgc 420
caatggtttc catcactctc ttggcattgg tttacctgcc aggtgtgata gcagcaattg 480
tccaacttca taatggaacc aagtataaga agtttccaca ttggttgat aagtggatgt 540
taacaagaaa gcagtttggg cttctcagtt tcttttttgc tgtactgcat gcaatttata 600
gtctgtctta cccaatgagg cgatcctaca gatacaagtt gctaaactgg gcatatcaac 660
aggtccaaca aaataaagaa gatgcctgga ttgagcatga tgtttggaga atggagattt 720
atgtgtctct gggaattgtg ggattggcaa tactggctct gttggctgtg acatctattc 780
catctgtgag tgactctttg acatggagag aatttcacta tattcagagc aagctaggaa 840
ttgtttccct tctactgggc acaatacacg cattgatttt tgacctggaat aagtggatag 900
atataaaaca atttgtatgg tatacacctc caacttttat gatagctgtt ttccttccaa 960
ttgttgtcct gatatttaaa agcatactat tcctgccatg cttgaggaag aagatactga 1020
agattagaca tggttgggaa gacgtcacca aaattaacaa aactgagata tgttccagc 1080
tgtagaatta ctgtttacac acatttttgt tcaatattga tatattttat caccaacatt 1140
tcaagtttgt atttgttaat aaaatgatta ttcaaggaaa aaaaaaaaaa aaaaa 1195

<210> 2
 <211> 339
 <212> PRT
 <213> Homo sapiens

<400> 2
 Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys Met
 1 5 10 15
 Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys Asp Thr
 20 25 30
 Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His Leu His Gln
 35 40 45
 Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu Leu Gln His Thr
 50 55 60
 Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile Lys Ile Ala Ala Ile
 65 70 75 80
 Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu Leu Arg Glu Val Ile His
 85 90 95
 Pro Leu Ala Thr Ser His Gln Gln Tyr Phe Tyr Lys Ile Pro Ile Leu
 100 105 110
 Val Ile Asn Lys Val Leu Pro Met Val Ser Ile Thr Leu Leu Ala Leu
 115 120 125
 Val Tyr Leu Pro Gly Val Ile Ala Ala Ile Val Gln Leu His Asn Gly
 130 135 140
 Thr Lys Tyr Lys Lys Phe Pro His Trp Leu Asp Lys Trp Met Leu Thr
 145 150 155 160
 Arg Lys Gln Phe Gly Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala
 165 170 175
 Ile Tyr Ser Leu Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu
 180 185 190
 Leu Asn Trp Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp
 195 200 205
 Ile Glu His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile
 210 215 220
 Val Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser
 225 230 235 240
 Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser Lys
 245 250 255
 Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu Ile Phe
 260 265 270
 Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp Tyr Thr Pro
 275 280 285
 Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val Val Leu Ile Phe
 290 295 300
 Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys Lys Ile Leu Lys Ile
 305 310 315 320
 Arg His Gly Trp Glu Asp Val Thr Lys Ile Asn Lys Thr Glu Ile Cys
 325 330 335
 Ser Gln Leu

<210> 3
 <211> 111
 <212> DNA
 <213> Homo sapiens

<400> 3
 ggcggaggcg gagggcgagg gcgaggggagc gggagcgccg cctggagcgc ggcaggtcat
 attgaacatt ccagatacct atcattactc gatgctgttg ataacagcaa g

60
 111

<210> 4
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 4
 actttgttga tgaccaggat tgga

24

<210> 5
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Primer

<400> 5
 cagaacttca gcacacacag gaac

24

<210> 6
 <211> 3627
 <212> DNA
 <213> Homo sapiens

<400> 6
 ggggcccgcga cctctgggca gcagcggcag ccgagactca cgggtcaagct aaggcgaaga 60
 gtgggtggct gaagccatac tattttatag aattaatgga aagcagaaaa gacatcacia 120
 accaagaaga actttggaaa atgaagccta ggagaaattt agaagaagac gattatttgc 180
 ataaggacac gggagagacc agcatgctaa aaagacctgt gcttttgcac ttgcacacaa 240
 cagcccatgc tgatgaattt gactgccctt cagaacttca gcacacacag gaactctttc 300
 cacagtggca cttgcccaatt aaaatagctg ctattatagc atctctgact tttctttaca 360
 ctcttctgag ggaagtaatt caccctttag caacttccca tcaacaatat ttttataaaa 420
 ttccaatcct ggtcatcaac aaagtcttgc caatggtttc catcactctc ttggcattgg 480
 tttacctgcc aggtgtgata gcagcaattg tccaacttca taatggaacc aagtataaga 540
 agtttccaca ttggttgat aagtggatgt taacaagaaa gcagtttggg cttctcagtt 600
 tcttttttgc tgtactgcat gcaatttata gtctgtctta cccaatgagg cgatcctaca 660
 gatacaagtt gctaaactgg gcatatcaac aggtccaaca aaataaagaa gatgcctgga 720
 ttgagcatga tgtttggaga atggagattt atgtgtctct gggaattgtg ggattggcaa 780
 tactggctct gttggctgtg acatctattc catctgtgag tgactctttg acatggagag 840
 aatttcacta tattcaggta aataatatat aaaataacc ctaagaggtaa atcttctttt 900
 tgtgtttatg atatagaata tgttgacttt accccataaa aaataacaaa tgtttttcaa 960
 cagcaaagat cttataactg ttccaattaa taatgtgctc tctgttgtt ttccctattg 1020
 cttctaatta ggacaagtgt ttctagaca taaataaaaag gcattaaaat attctttgtt 1080
 tttttttttt tgtttgtttg tttttgtttt gtttgtttgt ttttttgaga tgaagtctcg 1140
 ctctgttgcc catgctggag tacagtggca cgatctcggc tcaactgcaac ctgcgcctcc 1200
 tgggttcagg cgattctctt gcctcagcct cctgagtagc tgggattaca ggcacccatc 1260
 accatgtcca gctaattttt gtatttttag tagagacagg gttttcccat gttggccagg 1320
 ctggtctcga tctcctgacc tcaaatgatc cgccacctc ggccctccaa agtgctggga 1380
 tgacagttgt gagccaccac actcagcctg ctctttctaa tatttgaaac ttgttagaca 1440
 atttgctacc catctaattg gatatttttag gaatccaata tgcattggtt attatttctt 1500
 aaaaaaataa tctttttacc tgtcacctga atttagtaat gccttttatg ttacacaaact 1560
 tagcactttc cagaaacaaa aactctctcc ttgaaataat agagttttta tctaccaaag 1620
 atatgctagt gtctcatttc aaaggctgct ttttccagct tacattttat atacttactc 1680
 acttgaagtt tctaaatatt cttgtaattt taaaactatc tcagatttac tgaggtttat 1740
 cttctggtgg tagattatcc ataagaagag tgatgtgcca gaatcactct gggatccttg 1800
 tctgacaaga ttcaaaggac taaatttaat tcagtcatga acactgcaa ttaccgttta 1860
 tgggttagaca tctttggaaa tttccacaag gtcagacatt cgcaactatc ctttctacat 1920

39766-0160D2 Saved March 2 2006.txt

gtccacacgt	atactccaac	acttttattag	gcactctgatt	agtttggaaa	gtatgcctcc	1980
atctgaatta	gtccagtggtg	gcttagagtt	ggtacaacat	tctcacagaa	tttcctaatt	2040
ttgtagggttc	agcctgataa	ccactggagt	tctttgggtcc	tcattaaata	gctttcttca	2100
cacattgctc	tgcctgttac	acatatgatg	aacactgctt	tttagacttc	attaggaatt	2160
taggactgca	tcttgacaac	tgagcctatt	ctactatatg	tacaatacct	agcccataat	2220
aggtatacaa	tacacatttg	gtaaaactaa	ttttcaacca	atgacatgta	tttttcaact	2280
agtaacctag	aaatgtttca	cttaaaatct	gagaactggg	tacactacaa	gttaccttgg	2340
agattcatat	atgaaaacgc	aaacttagct	atttgattgt	attcactggg	acttaagaat	2400
gcgcctgaat	aattgtgagt	tcgatttgtt	ctggcaggct	aatgaccatt	tccagtaaag	2460
tgaatagagg	tcagaagtcg	tataaaagag	gtgtgtgcag	aacaccgttg	agattacata	2520
ggtgaacaac	tatttttaag	caacttttatt	tgtgtagtga	caaagcatcc	caatgcaggc	2580
tgaaatgttt	catcacatct	ctggatctct	ctattttgtg	cagacattga	aaaaattgtt	2640
catattattt	ccatgtttatc	agaatatttg	atttttttaa	aacataggcc	aagttcattc	2700
acttcattat	tcattttatca	aaatcagagt	gaatcacatt	agtcgccttc	acaactgata	2760
aagatcactg	aagtcaaatt	gattttttgct	ataatcttca	atctacctat	atttaattga	2820
gaatctaaaa	tgtacaaatc	attgtgttga	ttctgcagtg	atcctgctat	aagtaagact	2880
cagtccttga	tttttaggtat	cctgtgaaaa	gcagaattaa	gacaaataca	caagagacaa	2940
agcacaaaaa	ataaatatca	taaggggatg	aacaaaatgg	tgagaaaaga	gtagacaaag	3000
tttttgatca	cctgccttca	aagaaaggct	gtgaattttg	ttcacttaga	cagcttggag	3060
acaagaaatt	acccaaaagt	aaggtgagga	ggataggcaa	aaagagcaga	aagatgtgaa	3120
tggaatttgt	tgagaaatgt	gataggaaaa	caatcataga	taaaggattt	ccaagcaaca	3180
gagcatatcc	agatgaggta	ggatgggata	aactcttatt	gaaccaatct	tcaccaattt	3240
tgtttttctt	ttgcagagca	agctaggaat	tgtttccctt	ctactgggca	caatacacgc	3300
attgattttt	gcctggaata	agtggataga	tataaaacaa	tttgatgggt	atacacctcc	3360
aactttttatg	atagctgttt	tccttccaat	tgttgtcctg	atatttaaaa	gcatactatt	3420
cctgccatgc	ttgaggaaga	agatactgaa	gattagacat	ggttgggaag	acgtcaccaa	3480
aattaacaaa	actgagatat	gttcccagtt	gtagaattac	tgtttacaca	catttttgtt	3540
caatattgat	atattttatc	accaacattt	caagtttgta	tttgtttaata	aaatgattat	3600
tcaaggaaaa	aaaaaaaaaa	aaaaaaa				3627

<210> 7

<211> 519

<212> DNA

<213> Homo sapiens

<400> 7

gactttttaca	aaatttcctat	agagattgtg	aataaaacct	tacctatagt	tgccattact	60
ttgctctccc	tagtatacct	cgcaggctct	ctggcagctg	cttatcaact	ttattacggc	120
accaagtata	ggagatttcc	accttggttg	gaaacctggg	tacagtgtag	aaaacagctt	180
ggattactaa	gttttttctt	cgctatggtc	catgttgctt	acagcctctg	cttaccgatg	240
agaaggctcag	agagatattt	gtttctcaac	atggcttatt	agcaggttca	tgcaaatatt	300
gaaaactctt	ggaatgagga	agaagtttgg	agaattgaaa	tgtatatctc	ctttggcata	360
atgagccttg	gcttactttc	cctcctggca	gtcacttcta	tcccttcagt	gagcaatgct	420
ttaaactgga	gagaattcag	ttttattcag	tctacacttg	gatatgtcgc	tctgctcata	480
agtactttcc	atgttttaaat	ttatggatgg	aaacgagct			519

<210> 8

<211> 173

<212> PRT

<213> Homo sapiens

<400> 8

Asp	Phe	Tyr	Lys	Ile	Pro	Ile	Glu	Ile	Val	Asn	Lys	Thr	Leu	Pro	Ile
1			5					10					15		
Val	Ala	Ile	Thr	Leu	Leu	Ser	Leu	Val	Tyr	Leu	Ala	Gly	Leu	Leu	Ala
			20					25					30		
Ala	Ala	Tyr	Gln	Leu	Tyr	Tyr	Gly	Thr	Lys	Tyr	Arg	Arg	Phe	Pro	Pro
		35					40					45			
Trp	Leu	Glu	Thr	Trp	Leu	Gln	Cys	Arg	Lys	Gln	Leu	Gly	Leu	Leu	Ser
	50					55					60				

39766-0160D2 Saved March 2 2006.txt

Phe	Phe	Phe	Ala	Met	Val	His	Val	Ala	Tyr	Ser	Leu	Cys	Leu	Pro	Met
65					70					75				80	
Arg	Arg	Ser	Glu	Arg	Tyr	Leu	Phe	Leu	Asn	Met	Ala	Tyr	Gln	Gln	Val
			85						90				95		
His	Ala	Asn	Ile	Glu	Asn	Ser	Trp	Asn	Glu	Glu	Glu	Val	Trp	Arg	Ile
		100						105					110		
Glu	Met	Tyr	Ile	Ser	Phe	Gly	Ile	Met	Ser	Leu	Gly	Leu	Leu	Ser	Leu
		115					120					125			
Leu	Ala	Val	Thr	Ser	Ile	Pro	Ser	Val	Ser	Asn	Ala	Leu	Asn	Trp	Arg
	130					135					140				
Glu	Phe	Ser	Phe	Ile	Gln	Ser	Thr	Leu	Gly	Tyr	Val	Ala	Leu	Leu	Ile
145				150					155						160
Ser	Thr	Phe	His	Val	Leu	Ile	Tyr	Gly	Trp	Lys	Arg	Ala			
			165					170							

<210> 9
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 9	
ggtcgacttt tcctttatct ctttgtcaga gatctgattc atccatatgc tagaaaccaa	60
cagagtgcact tttaaaaaat tcctatagag attgtgaata aaaccttacc tatagttgcc	120
attactttgc tctccctagt ataccttgca ggtcttctgg cagctgctta tcaactttat	180
tacggcacca agtataggag atttccacct tgggtggaaa cctgggtaca gtgtagaaaa	240
cagcttggtat tactaagttg tttcttcgct atgggtccatg ttgcctacag cctctgctta	300
ccgatgagaa ggtcagagag at	322

<210> 10
 <211> 183
 <212> DNA
 <213> Homo sapiens

<400> 10	
tttgcagctt tgcagatacc cagactgagc tggaactgga atttgtcttc ctattgactc	60
tacttcttta aaagcggctg cccattacat tcctcagctg tccttgagct taggtgtaca	120
tgtgactgag tgttggccag tgagatgaag tctcctcaaa ggaaggcagc atgtgtcctt	180
ttt	183

<210> 11
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 11	
aagaaggaga atccatttag cacctcctca gcctggctca gtgattcata tgtggctttg	60
ggaatacttg ggttttttct gtttgtaact ttgggaatca cttctttgcc atctgttagc	120
aatgcagtc actggagaga gttccgattt gtccagtc aactgggtta tttgacctg	180
atcttgtgta cagccacac cctggtgtac ggtgggaaga gattcctcag cccttcaaat	240
ctcagatggt atcttctctg agcctacgtg ttagggctta tcattccttg cactgtgctg	300
gtgatcaagt ttgtccta atcatgcatgt gtagacaaca cccttacaag gatccgccag	360
ggctgggaaa ggaactcaaa acactagaaa aagcattgaa tggaaaatca atatttaaaa	420
caaagttcaa tttagctgga aaaaaaaa	448

<210> 12
 <211> 401
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature

<222> 11, 56, 233, 250, 310, 326, 377, 398

<223> n = a,t,c or g

<400> 12

ggccgcggca nccgctacga cctgggtcaac ctggcagtc	agcaggtctt ggccanacaa	60
gagccacctc tgggtgaagg aggaggtctg gcggatggag	atctacctct ccctgggagt	120
gctggccctc ggcacgttgt ccctgctggc cgtgacctca	ctgccgtcca ttgcaaactc	180
gctcaactgg agggagttca gcttcgttca gtcctcactg	ggctttgtgg cctcgtgct	240
gagcacactn cacacgtca cctacggctg gacccgcgcc	ttcgaggaga gccgctacaa	300
gttctacctn cctccacct tcacgntcac gctgctggtg	ccctgcgttc gttcatcctg	360
ggccaaagcc ctgtttntac tgccttgcat tcagccgnag	a	401

<210> 13

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR Primer AI139607.1

<400> 13

ttaggacaac ttgatcacca gca	23
---------------------------	----

<210> 14

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer AI139607.2

<400> 14

tgtccagtcc aaactggggtt attt	24
-----------------------------	----

<210> 15

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer R80991.1

<400> 15

aggagttca gcttcgttca gtc	23
--------------------------	----

<210> 16

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer R80991.2

<400> 16

ggtagaactt gtagcggctc tcct	24
----------------------------	----

<210> 17

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer 98P4B6.1

<400> 17

gactgagctg gaactggaat ttgt

24

<210> 18

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> RT-PCR primer 98P4B6.2

<400> 18

tttgaggaga cttcatctca ctgg

24

<210> 19

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> STEAP-1 peptide

<400> 19

Arg	Glu	Val	Ile	His	Pro	Leu	Ala	Thr	Ser	His	Gln	Gln	Tyr	Phe	Tyr
1				5				10						15	
Lys	Ile	Pro	Ile	Leu	Val										
				20											

<210> 20

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> STEAP-1 peptide

<400> 20

Arg	Arg	Ser	Tyr	Arg	Tyr	Lys	Leu	Leu	Asn	Trp	Ala	Tyr	Gln	Gln	Val
1				5					10					15	
Gln	Gln	Asn	Lys	Glu	Asp	Ala	Trp	Ile	Glu	His	Asp	Val	Trp	Arg	Met
			20					25					30		
Glu	Ile														

<210> 21

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> STEAP-1 PEPTIDE

<400> 21

Trp	Ile	Asp	Ile	Lys	Gln	Phe	Val	Trp	Tyr	Thr	Pro	Pro	Thr	Phe
1				5				10						15

<210> 22
 <211> 14
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> cDNA Synthesis primer

 <400> 22
 ttttgtacaa gctt 14

 <210> 23
 <211> 44
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> DNA Adaptor 1

 <400> 23
 ctaatacgac tcactatagg gctcgagcgg ccgcccgggc aggt 44

 <210> 24
 <211> 42
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> DNA Adaptor 2

 <400> 24
 gtaatacgac tcactatagg gcagcgtggt cgcggccgag gt 42

 <210> 25
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer 1

 <400> 25
 ctaatacgac tcactatagg gc 22

 <210> 26
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Nested primer (NP) 1

 <400> 26
 tcgagcggcc gcccgggcag gt 22

 <210> 27
 <211> 20
 <212> DNA
 <213> Artificial Sequence


```

<220>
<223> Nested primer (NP) 2

<400> 27
agcgtgggtcg cggccgagggt                                20

<210> 28
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> RT-PCR primer 1A

<400> 28
actttgttga tgaccaggat tgga                                24

<210> 29
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> RT-PCR primer 1B

<400> 29
cagaacttca gcacacacag gaac                                24

<210> 30
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 30
atatcgccgc gctcgtcgtc gacaa                                25

<210> 31
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 31
agccacacgc agtcattgt agaagg                                26

<210> 32
<211> 15
<212> PRT
<213> Homo sapiens

<400> 32
Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp Ile Glu His
 1          5          10          15

```

<210> 33
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 33
 Lys Lys Glu Asn Pro Phe Ser Thr Ser Ser Ala Trp Leu Ser Asp Ser
 1 5 10 15
 Tyr Val Ala Leu Gly Ile Leu Gly Phe Phe Leu Phe Val Leu Leu Gly
 20 25 30
 Ile Thr Ser Leu Pro Ser Val Ser Asn Ala Val Asn Trp Arg Glu Phe
 35 40 45
 Arg Phe Val Gln Ser Lys Leu Gly Tyr Leu Thr Leu Ile Leu Cys Thr
 50 55 60
 Ala His Thr Leu Val Tyr Gly Gly Lys Arg Phe Leu Ser Pro Ser Asn
 65 70 75 80
 Leu Arg Trp Tyr Leu Pro Ala Ala Tyr Val Leu Gly Leu Ile Ile Pro
 85 90 95
 Cys Thr Val Leu Val Ile Lys Phe Val Leu Ile Met Pro Cys Val Asp
 100 105 110
 Asn Thr Leu Thr Arg Ile Arg Gln Gly Trp Glu Arg Asn Ser Lys His
 115 120 125

<210> 34
 <211> 128
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 15, 74, 105, 122
 <223> Xaa = Any Amino Acid

<400> 34
 Ala Thr Thr Trp Ser Thr Trp Gln Ser Ser Arg Ser Trp Pro Xaa Lys
 1 5 10 15
 Ser His Leu Trp Val Lys Glu Glu Val Trp Arg Met Glu Ile Tyr Leu
 20 25 30
 Ser Leu Gly Val Leu Ala Leu Gly Thr Leu Ser Leu Leu Ala Val Thr
 35 40 45
 Ser Leu Pro Ser Ile Ala Asn Ser Leu Asn Trp Arg Glu Phe Ser Phe
 50 55 60
 Val Gln Ser Ser Leu Gly Phe Val Ala Xaa Val Leu Ser Thr Leu His
 65 70 75 80
 Thr Leu Thr Tyr Gly Trp Thr Arg Ala Phe Glu Glu Ser Arg Tyr Lys
 85 90 95
 Phe Tyr Leu Pro Pro Thr Phe Thr Xaa Thr Leu Leu Val Pro Cys Val
 100 105 110
 Arg Ser Ser Trp Ala Lys Ala Leu Phe Xaa Leu Pro Cys Ile Gln Pro
 115 120 125

<210> 35
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> RT-PCR primer R80991.3

<400> 35
acaagagcca cctctgggtg aa 22

<210> 36
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> RT-PCR primer R80991.4

<400> 36
agttgagcga gtttgcaatg gac 23

<210> 37
<211> 15
<212> PRT
<213> Homo sapiens

<400> 37
Trp Lys Met Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu
1 5 10 15